

Notice of Allowability

Application No.

10/727,381

Examiner

Jeremy C. Norris

Applicant(s)

PARAMESWARAN ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed After Final Rejection 24 November 2006.
2. ☒ The allowed claim(s) is/are 1-44.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

Claims 1-44 are allowed.

The following is an examiner's statement of reasons for allowance: Claim 1 states the limitation "the first pair of vias is positioned in a first plane, each point in the first plane is substantially equidistant from each via in the second pair of vias, the second pair of vias is positioned in a second plane, each point in the second plane is substantially equidistant from each via in the first pair of vias". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art. Claim 14 states the limitation "the first pair of vias is positioned relative to the second pair of vias such that a crosstalk effect caused by the first signal pair on the second positive signal reduces a crosstalk effect caused by the first signal pair on the second negative signal". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art. Claim 20 states the limitation "the first pair of vias is positioned in a first plane, each point in the first plane is substantially equidistant from each via in the second pair of vias, the second pair of vias is positioned in a second plane, each point in the second plane is substantially equidistant from each via in the first pair of vias". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art. Claim 28 states the limitation "each point in the first plane is substantially equidistant from each via in the second pair of vias, and each point in the second plane is substantially equidistant from each via in the first pair of vias". This

limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art. Claim 38 states the limitation "the first pair of leads is positioned in a first plane, each point in the first plane is substantially equidistant from each lead in the second pair of leads, the second pair of leads is positioned in a second plane, and each point in the second plane is substantially equidistant from each lead in the first pair of leads". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art. Claim 40 states the limitation "the means for conveying the first positive signal and the means for conveying the first negative signal are positioned in a first plane, each point in the first plane is substantially equidistant from the means for conveying the second positive signal and the means for conveying the second negative signal, the means for conveying the second positive signal and the means for conveying the second negative signal are positioned in a second plane, and each point in the second plane is substantially equidistant from the means for conveying the first positive signal and the means for conveying the first negative signal". This limitation, in conjunction with the other claimed features, was neither found to be disclosed in, nor suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments, see amendment After Final Rejection, filed 24 November 2006, with respect to claims 1-44 have been fully considered and are persuasive. The rejection of claims 1-44 has been withdrawn.

Specifically, regarding claims 1-13 and 20-40, the Examiner is persuaded by Applicant's argument that US 6,641,411 (Stoddard) does not disclose or suggest the limitation "the first pair of vias is positioned in a first plane, each point in the first plane is substantially equidistant from each via in the second pair of vias, the second pair of vias is positioned in a second plane, [and] each point in the second plane is substantially equidistant from each via in the first pair of vias". While the ordinarily skilled artisan may indeed interpret Stoddard as having the first pair of vias is positioned in a first plane, each point in the first plane is substantially equidistant from each via in the second pair of vias, Stoddard clearly does not concurrently show the second pair of vias is positioned in a second plane, [and] each point in the second plane is substantially equidistant from each via in the first pair of vias. At best, Stoddard can only be seen as showing one via-containing-plane being equidistant from the opposite pair of vias. Thus, the claimed invention is neither disclosed nor suggested by Stoddard.

Additionally, regarding claims 14-19, the Examiner is persuaded by Applicant's argument that US 2005/077977 (Beale) "depends on the arrangement of four pairs of vias" as opposed to the instantly claimed arrangement which only requires two vias. The ordinarily skilled artisan would understand that only with all four sets of signal pairs can there be any reduction in crosstalk, thus, it is clear that Beale is incapable of

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providing the structure and effect that the "first pair of vias is positioned relative to the second pair of vias such that a crosstalk effect caused by the first signal pair on the second positive signal reduces a crosstalk effect caused by the first signal pair on the second negative signal. Hence, the claimed invention is neither disclosed nor suggested by Beale.

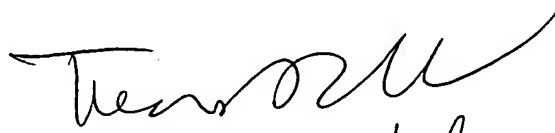
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCSN


Tuan Dinh
12-22-06